

**DATA ARCHITECTURES FOR MANAGING QUALITY OF SERVICE  
AND/OR BANDWIDTH ALLOCATION IN A REGIONAL/ACCESS  
NETWORK (RAN)**

**Abstract of the Disclosure**

Data architectures provide for managing Quality of Service (QoS) and/or bandwidth allocation in a Regional/Access Network (RAN) that provides end-to-end transport between a Network Service Provider (NSP) and/or an Application Service Provider (ASP), and a Customer Premises Network (CPN) that includes a Routing Gateway (RG). The data architecture includes a NSP access session record maintained at the RAN that defines QoS and/or bandwidth allocation for an access session, such as a Point-to-Point (PPP) access session, associated with the RG and the NSP. A corresponding NSP access session record is maintained at the NSP associated with the access session. The NSP access session record at the RAN and the corresponding NSP access session record at the NSP both define a QoS and/or bandwidth allocation specified by the NSP associated with the session or both define a QoS and/or bandwidth allocation specified by the RAN. An application flow record maintained at the RAN defines QoS and/or bandwidth allocation for an application flow associated with the RG and the ASP. A corresponding application flow record is maintained at the ASP associated with the application flow. Both the application flow record at the RAN and the corresponding application flow record at the ASP define a QoS and/or bandwidth allocation specified by the ASP.

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